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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,507	03/26/2004	Stephane Cayla	BGC:0002US (N2325-US)	8147
21906 7590 04/07/2008 TROP PRUNER & HU, PC 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631				
EXAMINER				
GELIN, JEAN ALLAND				
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2617				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,507

Applicant(s)

CAYLA ET AL.

Examiner

JEAN A. GELIN

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-15 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-15, 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This is in response to the Applicant's arguments and amendments filed on January 24, 2008 in which claims 1, 2-15, and 17-20 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 6-15, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US 7,016,372) in view of Helferich (US 7,039,428).

Regarding claims 1, 13, and 15, Haartsen teaches an apparatus for transmitting data blocks on a communications channel having a radio link between two stations (i.e., master and slave) including a user equipment (e.g., slave unit), comprising: means for receiving first data blocks from the user equipment (i.e., master has means to receive packet from the slave, col. 8, lines 16-65); means for transmitting second data blocks to the user equipment (i.e., packets are alternatively transmitted from one unit to another unit and vice versa, (col. 8, lines 16-65); and means for dynamically setting a polling interval for the transmission of polling messages to the user equipment after transmission of the second data blocks, the polling interval being set in accordance with at least one of: a size of one or more data blocks received by the apparatus from the user equipment, a size of one or more blocks transmitted from the apparatus to the user

equipment, and a service to which the user equipment is subscribed (i.e., master dynamically adjusts the polling interval based on traffic condition, col. 7, lines 25-41 and col. 8, line 30 to col. 9, line 65; the master can change the polling interval between T_{min} and T_{max} where T_{min} is determined by the throughput requirements, and dynamically adjusting the polling interval based on the result of the polling operation col. 10, lines 13-62).

Haartsen does not specifically teach means for transmitting polling messages to the user equipment acknowledges receipt of the second data blocks.

However, the preceding limitation is known in the art of communications. Helferich teaches acknowledgment from the paging transceiver (UE) is received to indicate that the page call was received, when the acknowledgment is received the system sets an acknowledgment flag corresponding to the stored message (col. 8, lines 17-65). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Helferich within the system of Haartsen in order to automatically transmitted from the paging transceiver to base station for storage in the subscriber database of paging terminal controller when the paging transceiver receives selective call signals.

Regarding claims 3, 17, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the means for dynamically setting a polling interval is adapted to set the polling interval for each user equipment independently (i.e., within the master has complete control over which slave is being polled, col. 8, line 66 to col. 9, line 65 and col. 10).

Regarding claims 6, 19, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the user equipment comprises one or more user equipments having a first priority and one or more user equipments having a second priority lower than the first priority, and the means for dynamically setting a polling interval is adapted to reduce the polling interval when the user equipments having a first priority are not transmitting (col. 7, lines 42-59 and col. 9, lines 25-67).

Regarding claim 7, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches a buffer means for buffering data blocks to be transmitted to the UE by the apparatus (i.e., inherently master has a buffer or storage device to buffer packet prior to transmit to the slave device, col. 8, lines 16-65).

Regarding claim 8, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the means for dynamically setting a polling interval is adapted to set the polling interval in accordance with an occupancy state of the buffer means (col. 12, line 61 to col. 13, line 22).

Regarding claims 9, 20, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the user equipment is located in a radio coverage area of a cellular mobile radio network (col. 4, lines 6-26) and the means for dynamically setting a polling interval is adapted to set the polling interval in accordance with at least an estimated used transmission capacity value for the radio coverage area (col. 8, lines 16-65 and col. 10, lines 31-47).

Regarding claim 10, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the means for dynamically setting a polling interval

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includes a storage unit for storing information relating to user equipments (i.e., scheduled poll event for the slave, col. 7, lines 25-41).

Regarding claim 11, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the storage unit includes data relating to any of: a user equipment identifier, a quality of service profile associated with a user equipment, a number of user equipments located within a geographical area (col. 8, lines 44-65).

Regarding claim 12, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches wherein the means for dynamically setting a polling interval is adapted to set the polling interval in accordance with a quality parameter of signals received over the radio link (col. 7, lines 25-69).

Regarding claim 14, Haartsen in view of Helferich teaches all the limitations above. Haartsen further teaches the apparatus is a packet control unit which has a first input for data from an asynchronous interface and a second input for data from a synchronous interface (col. 4, line 60 to col. 5, line 23, col. 17, lines 31-46).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US 7,016,372) in view of Helferich (US 7,039,428) further in view of Schoch (US 5,973,609).

Regarding claims 4, 18, Haartsen in view of Helferich teaches all the limitations above. Haartsen further all slaves receive the packets sent by the master on the forward link, col. 8, lines 45-65). Haartsen does not specifically teach the means for dynamically setting a polling interval is adapted to set the polling interval for a group of user equipments.

However, the preceding limitation is known in the art of communication. Schoch teaches when the system becomes less heavily loaded, users are divided into groups that are then polled, the size of the groups is selected on the number of users having data to transmit, a polling cycle is completed when all groups have been polled (col. 2, lines 15-52, col. 5, line 63 to col. 6, line 13), and polling interval (col. 10, lines 47-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Schoch within the system Haartsen and Helferich in order to dynamically change the group sizes and mappings in response to system activity, and increase the efficiency of the system by polling users per group.

Regarding claim 5, Haartsen in view of Helferich teaches further in view of Schoch teaches all the limitations above. Schoch further teaches the group of user equipments is defined by a subscription to a service (col. 3, lines 1-14 and col. 5, line 63 to col. 6, line 13).

Response to Arguments

6. Applicant's arguments filed 01/24/08 have been fully considered but they are not persuasive.

The Applicant argues that Helferich fails to teach means for transmitting polling messages to the user equipment to request that the user equipment acknowledges receipt of the second data blocks. Helferich merely teaches that a paging system issuing a page call through a base station to a pager. After issuing the page call, the paging system determines whether an acknowledgement has been received from the pager. The Further argues that sending a page and then waiting to see if the page was acknowledged by the recipient is completely different from the claimed subject matter.

However, the Examiner disagrees with the preceding assertion. Helferich teaches many paging transceivers are able to issue an acknowledgment back to the base station in response to received a message, the message can be hundreds of kilobytes or grater in size in addition to the address (col. 2, lines 5-40). Helferich further teaches that the base station transmits selective call signal and CI data to the target transceiver, upon receiving the call signal and the CI data the transceiver transmits an acknowledgment to the base station (col. 8, lines 18-67). Helferich does not simply teach transmit an acknowledgement upon receiving a page signal. Helferich also teaches transmitting an acknowledgment upon receiving a message which can be any size or a data block. Therefore, the rejection is maintained and is made final.

The Applicant further argues that claims 13 and 15 are similarly allowable over Haartsen and Helferich. The Examiner disagrees with the applicant's assertion, claims 13 and 15 are rejected for the same reasons recited above.

The Applicant further argues that dependent claims are allowable for at least the same reasons as corresponding independent claims. The Examiner disagrees with the applicant's assertion, claims depend from 1, 13, and 15 are rejected for the same reasons recited above.

The Applicant further argues that Schoch fails to teach claim features missing from Haartsen and Helferich. Schoch fails to teach polling a UE to determine if the equipment is received data and dynamically setting a polling interval for the transmission of time.

However, the Examiner disagrees with the preceding assertion. Haartsen with Helferich disclose the preceding limitation as recited in argument above. The introduction of Schoch is to address the concept of polling for a group of user equipments. Therefore, the rejection is maintained and is made final.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEAN A. GELIN whose telephone number is (571)272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGelin
April 7, 2008 /Jean A Gelin/
Primary Examiner, Art Unit 2617

Application Number**Application/Control No.**

10/810,507

Examiner

JEAN A. GELIN

**Applicant(s)/Patent under
Reexamination**

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